

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

JUL 12 2012

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

Farmington Field Office

1a. Type of Work DRILL	5. Lease Number SF 078840 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator ConocoPhillips Company	7. Unit Agreement Name MV-NMNM78413A DK-NMNM78413C San Juan 28-7 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number 113N RCVD SEP 27 '12 OIL CONS. DIV. DIST. 3
4. Location of Well Surface: Unit O(SWSE), 1020' FSL & 1675' FEL BHL : Unit I(NESE), 1990' FSL & 975' FEL Surface: Latitude: 36.568515° N (NAD83) Longitude: 107.613041° W BHL : Latitude: 36.571154° N (NAD83) Longitude: 107.610618° W	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 18, T27N, R7W API # 30-039-31146
14. Distance in Miles from Nearest Town 20.2 miles from Blanco	12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 975'	
16. Acres in Lease 1281.510	17. Acres Assigned to Well 320.26 E/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 77' from SJ 28-7 113M MV/DK	
19. Proposed Depth 7492 This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6577' GL	22. Approx. Date Work will Start DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Arleen Kellywood</u> Arleen Kellywood (Staff Regulatory Tech)	7/12/12 Date

Hold C104
for Directional Survey
and "As Drilled" plat

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report attached

Threatened and Endangered Species Report attached

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

Example Master Plan Type 3

Bond Numbers ES-0048 and ES-0085

NOTIFY AZTEC OCD 24 HRS.

PRIOR TO CASING & CEMENT

NMOCD

OCT 04 2012 ca

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 West Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED Form C-102
Revised July 18, 2010
Submit one copy to appropriate
District Office
JUL 12 2012

Farmington Field Office
Bureau of Land Management

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039 - 31146		*Pool Code 71599/72319	*Pool Name BASIN DAKOTA/BLANCO MESAVERDE
*Property Code 31739	*Property Name SAN JUAN 28-7 UNIT		*Well Number 113N
*OGRID No. 217817	*Operator Name CONOCOPHILLIPS COMPANY		*Elevation 6577'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	18	27-N	7-W		1020	SOUTH	1675	EAST	RIO ARRIBA

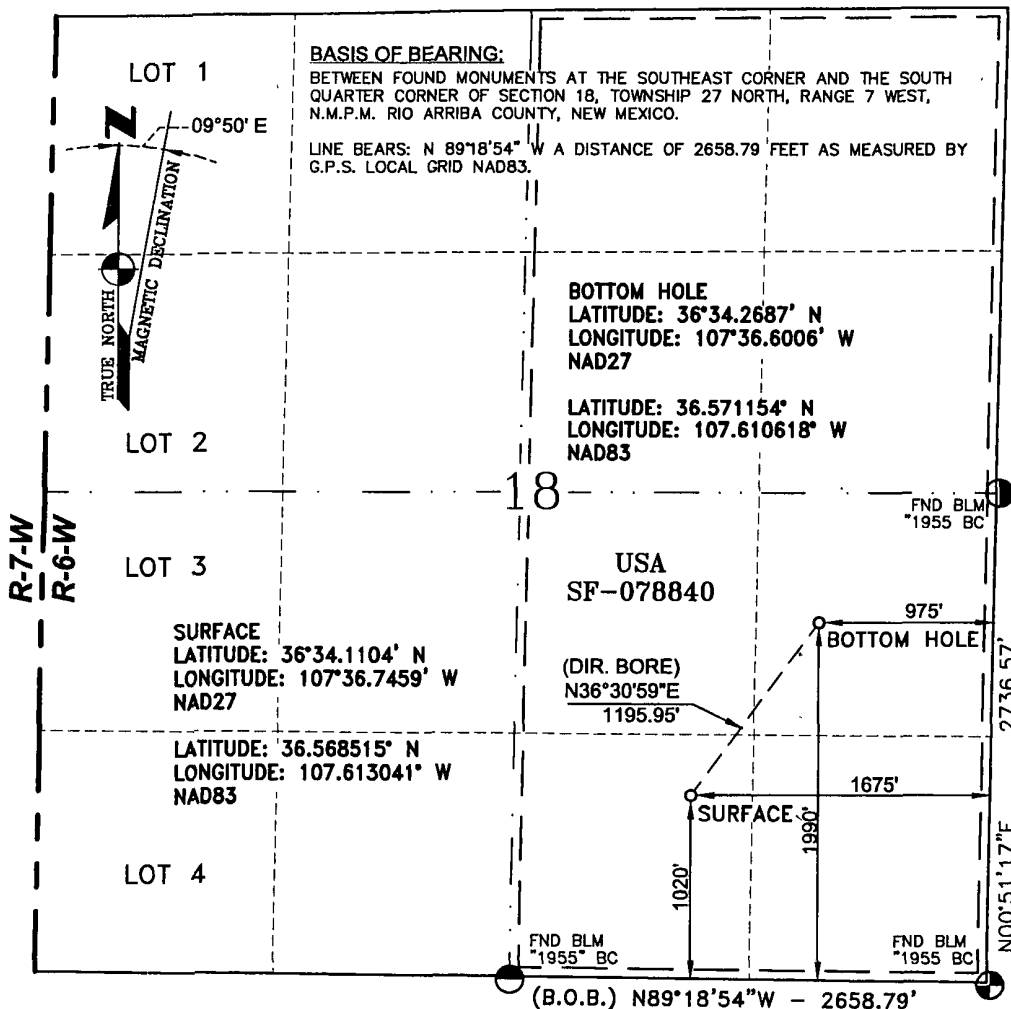
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	18	27-N	7-W		1990	SOUTH	975	EAST	RIO ARRIBA

¹³ Dedicated Acres DK 320.36 ACRES E/2 MV 320.36 ACRES E/2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or has a working interest or is to use any agreement or a compulsory pooling order heretofore entered by the division.


 4/28/11
 Signature Date
 Arleen R. Kellywood
 Printed Name
 E-mail Address

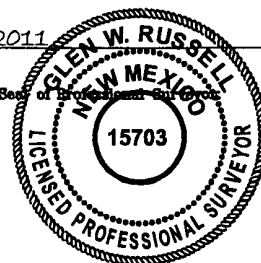
18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

APRIL 21, 2011

Date of Survey

Signature and Seal of Professional Surveyor



GLEN W. RUSSELL
Certificate Number

15703

RECEIVED

JUL 24 2012

ConocoPhillips

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 28-7 UNIT 113N

Bureau of Land Management
Farmington Field Office
DEVELOPMENT

San Juan Business Unit

Lease:		AFE #: WAN.CDR.1034				AFE \$:	
Field Name: SAN JUAN		Rig: Aztec Rig 711		State: NM	County: RIO ARRIBA		API #:
Geologist:		Phone:		Geophysicist:		Phone:	
Geoscientist:		Phone:		Prod. Engineer:		Phone:	
Res. Engineer:		Phone:		Proj. Field Lead:		Phone:	
Primary Objective (Zones):							
Zone	Zone Name						
FRR	BASIN DAKOTA (PRORATED GAS)						
RON	BLANCO MESAVERDE (PRORATED GAS)						
Location: Surface Datum Code: NAD 27 Directional							
Latitude: 36.568506	Longitude: -107.612432	X:	Y:	Section: 18	Range: 007W		
Footage X: 1675 FEL	Footage Y: 1020 FSL	Elevation: 6577	(FT)	Township: 027N			
Tolerance:							
Location: Bottom Hole Datum Code: NAD 27 Directional							
Latitude: 36.571145	Longitude: -107.610009	X:	Y:	Section: 18	Range: 007W		
Footage X: 975 FEL	Footage Y: 1990 FSL	Elevation:	(FT)	Township: 027N			
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2012		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6592 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	MD (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	200	6392		☐			12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 121 cuft. Circulate cement to surface.
NACIMIENTO	573	6019		☐			
OJO ALAMO	2123	4469		☐			
KIRTLAND	2243	4349		☐			
FRUITLAND	2541	4051		☐			Possible Gas
PICTURED CLIFFS	2970	3622		☐	743		
LEWIS	3106	3486		☐			
HUERFANITO BENTONITE	3309	3283		☐			
CHACRA	3920	2672		☐			
MASSIVE CLIFF HOUSE	4641	1951		☐	279		Gas; Cliffhouse is dry
MENEFEE	4669	1923		☐			
Intermediate Casing	4819	1773		☐			121 8 3/4" Hole. 7", 23 ppf, J-55, LTC Casing. Cement with 1294 cuft. Circulate cement to surface.
POINT LOOKOUT	5225	1367		☐			
MANCOS	5599	993		☐			
UPPER GALLUP	6410	182		☐			
GREENHORN	7183	-591		☐			
GRANEROS	7248	-656		☐			
TWO WELLS	7289	-697		☐	2919		Gas
PAGUATE	7343	-751		☐			
UPPER CUBERO	7406	-814		☐			
LOWER CUBERO	7433	-841		☐			Est bottom perf ~15' above TD.

Printed on: 7/24/2012 9:43:22 AM

PROJECT PROPOSAL - New Drill / Sidetrack

SAN JUAN 28-7 UNIT 113N

DEVELOPMENT

Total Depth	7492	-900	☐	196	6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC/BTC casing. Cement w/ 355 cuft. Circulate cement a minimum of 100' inside the previous casing string.
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ENCINAL	7492	-900	☐	TD - T/ENCN
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Reference Wells:

Reference Type	Well Name	Comments
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Logging Program:

Intermediate Logs: ☐ Log only if show ☐ GR/ILD ☐ Triple Combo

TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☐ TDT ☒ Other

Mud log from the Upper Gallup to TD. Mud loggers will call final TD.

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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ConocoPhillips or its affiliates

Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJBU
Project: San Juan Basin - New Mexico West Wells
Site: San Juan 28 Wells
Well: SJ 28-7 #113N
Wellbore: Principal Wellbore
Design: Plan #1

Local Co-ordinate Reference: Well SJ 28-7 #113N
TVD Reference: RKB @ 6592.0ft (Original Well Elev)
MD Reference: RKB @ 6592.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project: San Juan Basin - New Mexico West Wells, New Mexico, Directional "S"
Map System: US State Plane 1927 (Exact solution) **System Datum:** Ground Level
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico West 3003 Using geodetic scale factor

Site: San Juan 28 Wells

Site Position: **Northing:** 2,046,354.53 ft **Latitude:** 36° 37' 24.966 N
From: Lat/Long **Easting:** 579,505.00 ft **Longitude:** 107° 33' 44.640 W
Position Uncertainty: 15.0 ft **Slot Radius:** " **Grid Convergence:** 0.16 °

Well: SJ 28-7 #113N

Well Position **+N/-S** 0.0 ft **Northing:** 2,026,260.51 ft **Latitude:** 36° 34' 6.625 N
+E/-W 0.0 ft **Easting:** 564,869.35 ft **Longitude:** 107° 36' 44.754 W
Position Uncertainty 15.0 ft **Wellhead Elevation:** ft **Ground Level:** 6,557.0 ft

Wellbore: Principal Wellbore

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2007	12/22/2008	10.17	63.41	50,891

Design: Plan #1

Audit Notes:

Version: **Phase:** PROTOTYPE **Tie On Depth:** 0.0

Vertical Section	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	36.52

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,451.6	25.03	36.52	2,412.1	216.2	160.1	2.00	2.00	0.00	36.52	
4,216.1	25.03	36.52	4,010.9	816.2	604.4	0.00	0.00	0.00	0.00	
5,050.5	0.00	0.00	4,819.0	960.4	711.2	3.00	-3.00	0.00	180.00	SJ 28-7 #113N ICP
7,723.5	0.00	0.00	7,492.0	960.4	711.2	0.00	0.00	0.00	0.00	SJ 28-7 #113N PCI

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #113N
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6592.0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6592.0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 #113N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
573.0	0.00	0.00	573.0	0.0	0.0	0.0	0.00	0.00	0.00
NACIMIENTO									
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	2.00	36.52	1,300.0	1.4	1.0	1.7	2.00	2.00	0.00
1,400.0	4.00	36.52	1,399.8	5.6	4.2	7.0	2.00	2.00	0.00
1,500.0	6.00	36.52	1,499.5	12.6	9.3	15.7	2.00	2.00	0.00
1,600.0	8.00	36.52	1,598.7	22.4	16.6	27.9	2.00	2.00	0.00
1,700.0	10.00	36.52	1,697.5	35.0	25.9	43.5	2.00	2.00	0.00
1,800.0	12.00	36.52	1,795.6	50.3	37.3	62.6	2.00	2.00	0.00
1,900.0	14.00	36.52	1,893.1	68.4	50.6	85.1	2.00	2.00	0.00
2,000.0	16.00	36.52	1,989.6	89.2	66.0	111.0	2.00	2.00	0.00
2,100.0	18.00	36.52	2,085.3	112.7	83.4	140.2	2.00	2.00	0.00
2,139.8	18.80	36.52	2,123.0	122.8	90.9	152.8	2.00	2.00	0.00
OJO ALAMO									
2,200.0	20.00	36.52	2,179.8	138.8	102.8	172.8	2.00	2.00	0.00
2,267.5	21.35	36.52	2,243.0	158.0	117.0	196.6	2.00	2.00	0.00
KIRTLAND									
2,300.0	22.00	36.52	2,273.2	167.6	124.1	208.6	2.00	2.00	0.00
2,400.0	24.00	36.52	2,365.2	199.0	147.4	247.7	2.00	2.00	0.00
2,451.6	25.03	36.52	2,412.1	216.2	160.1	269.1	2.00	2.00	0.00
2,500.0	25.03	36.52	2,456.0	232.7	172.3	289.6	0.00	0.00	0.00
2,593.8	25.03	36.52	2,541.0	264.6	195.9	329.2	0.00	0.00	0.00
FRUITLAND									
2,600.0	25.03	36.52	2,546.6	266.7	197.5	331.9	0.00	0.00	0.00
2,700.0	25.03	36.52	2,637.2	300.7	222.7	374.2	0.00	0.00	0.00
2,800.0	25.03	36.52	2,727.8	334.7	247.9	416.5	0.00	0.00	0.00
2,900.0	25.03	36.52	2,818.4	368.7	273.0	458.8	0.00	0.00	0.00
3,000.0	25.03	36.52	2,909.1	402.7	298.2	501.1	0.00	0.00	0.00
3,067.3	25.03	36.52	2,970.0	425.6	315.2	529.6	0.00	0.00	0.00
PICTURED CLIFFS									
3,100.0	25.03	36.52	2,999.7	436.7	323.4	543.4	0.00	0.00	0.00
3,200.0	25.03	36.52	3,090.3	470.7	348.6	585.7	0.00	0.00	0.00
3,217.4	25.03	36.52	3,106.0	476.6	353.0	593.1	0.00	0.00	0.00
LEWIS									
3,300.0	25.03	36.52	3,180.9	504.7	373.8	628.1	0.00	0.00	0.00
3,400.0	25.03	36.52	3,271.5	538.7	398.9	670.4	0.00	0.00	0.00
3,441.4	25.03	36.52	3,309.0	552.8	409.4	687.9	0.00	0.00	0.00
HUERFANITO BENTONITE									
3,500.0	25.03	36.52	3,362.1	572.7	424.1	712.7	0.00	0.00	0.00
3,600.0	25.03	36.52	3,452.7	606.7	449.3	755.0	0.00	0.00	0.00
3,700.0	25.03	36.52	3,543.3	640.7	474.5	797.3	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 28-7 #113N
Company:	ConocoPhillips SJB	TVD Reference:	RKB @ 6592 0ft (Original Well Elev)
Project:	San Juan Basin - New Mexico West Wells	MD Reference:	RKB @ 6592 0ft (Original Well Elev)
Site:	San Juan 28 Wells	North Reference:	True
Well:	SJ 28-7 #113N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Principal Wellbore		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N- S (ft)	+E- W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,800.0	25.03	36.52	3,633.9	674.8	499.7	839.6	0.00	0.00	0.00
3,900.0	25.03	36.52	3,724.5	708.8	524.8	881.9	0.00	0.00	0.00
4,000.0	25.03	36.52	3,815.1	742.8	550.0	924.2	0.00	0.00	0.00
4,100.0	25.03	36.52	3,905.7	776.8	575.2	966.5	0.00	0.00	0.00
4,115.7	25.03	36.52	3,920.0	782.1	579.2	973.2	0.00	0.00	0.00
CHACRA									
4,200.0	25.03	36.52	3,996.3	810.8	600.4	1,008.9	0.00	0.00	0.00
4,216.1	25.03	36.52	4,010.9	816.2	604.4	1,015.7	0.00	0.00	0.00
4,300.0	22.51	36.52	4,087.7	843.4	624.6	1,049.5	3.00	-3.00	0.00
4,400.0	19.51	36.52	4,181.0	872.2	645.9	1,085.3	3.00	-3.00	0.00
4,500.0	16.51	36.52	4,276.1	897.1	664.3	1,116.3	3.00	-3.00	0.00
4,600.0	13.51	36.52	4,372.7	917.9	679.7	1,142.2	3.00	-3.00	0.00
4,700.0	10.51	36.52	4,470.5	934.6	692.1	1,163.0	3.00	-3.00	0.00
4,800.0	7.51	36.52	4,569.3	947.2	701.4	1,178.6	3.00	-3.00	0.00
4,872.2	5.35	36.52	4,641.0	953.7	706.2	1,186.7	3.00	-3.00	0.00
MASSIVE CLIFF HOUSE									
4,900.0	4.51	36.52	4,668.7	955.6	707.6	1,189.1	3.00	-3.00	0.00
4,900.3	4.50	36.52	4,669.0	955.6	707.7	1,189.1	3.00	-3.00	0.00
MENEFFEE									
5,000.0	1.51	36.52	4,768.6	959.9	710.8	1,194.4	3.00	-3.00	0.00
5,050.5	0.00	0.00	4,819.0	960.4	711.2	1,195.0	3.00	-3.00	0.00
SJ 28-7 #113N ICP									
5,100.0	0.00	0.00	4,868.5	960.4	711.2	1,195.0	0.00	0.00	0.00
5,200.0	0.00	0.00	4,968.5	960.4	711.2	1,195.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,068.5	960.4	711.2	1,195.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,168.5	960.4	711.2	1,195.0	0.00	0.00	0.00
5,456.5	0.00	0.00	5,225.0	960.4	711.2	1,195.0	0.00	0.00	0.00
POINT LOOKOUT									
5,500.0	0.00	0.00	5,268.5	960.4	711.2	1,195.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,368.5	960.4	711.2	1,195.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,468.5	960.4	711.2	1,195.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,568.5	960.4	711.2	1,195.0	0.00	0.00	0.00
5,830.5	0.00	0.00	5,599.0	960.4	711.2	1,195.0	0.00	0.00	0.00
MANCOS									
5,900.0	0.00	0.00	5,668.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,768.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,100.0	0.00	0.00	5,868.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,200.0	0.00	0.00	5,968.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,068.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,168.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,268.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,368.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,641.5	0.00	0.00	6,410.0	960.4	711.2	1,195.0	0.00	0.00	0.00
UPPER GALLUP									
6,700.0	0.00	0.00	6,468.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,568.5	960.4	711.2	1,195.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,668.5	960.4	711.2	1,195.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,768.5	960.4	711.2	1,195.0	0.00	0.00	0.00
7,100.0	0.00	0.00	6,868.5	960.4	711.2	1,195.0	0.00	0.00	0.00
7,200.0	0.00	0.00	6,968.5	960.4	711.2	1,195.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,068.5	960.4	711.2	1,195.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,168.5	960.4	711.2	1,195.0	0.00	0.00	0.00
7,414.5	0.00	0.00	7,183.0	960.4	711.2	1,195.0	0.00	0.00	0.00

ConocoPhillips or its affiliates

Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJB
Project: San Juan Basin - New Mexico West Wells
Site: San Juan 28 Wells
Well: SJ 28-7 #113N
Wellbore: Principal Wellbore
Design: Plan #1

Local Co-ordinate Reference: Well SJ 28-7 #113N
TVD Reference: RKB @ 6592.0ft (Original Well Elev)
MD Reference: RKB @ 6592.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
GREENHORN									
7,479.5	0.00	0.00	7,248.0	960.4	711.2	1,195.0	0.00	0.00	0.00
GRANEROS									
7,500.0	0.00	0.00	7,268.5	960.4	711.2	1,195.0	0.00	0.00	0.00
7,520.5	0.00	0.00	7,289.0	960.4	711.2	1,195.0	0.00	0.00	0.00
TWO WELLS									
7,574.5	0.00	0.00	7,343.0	960.4	711.2	1,195.0	0.00	0.00	0.00
PAGUATE									
7,600.0	0.00	0.00	7,368.5	960.4	711.2	1,195.0	0.00	0.00	0.00
7,637.5	0.00	0.00	7,406.0	960.4	711.2	1,195.0	0.00	0.00	0.00
UPPER CUBERO									
7,664.5	0.00	0.00	7,433.0	960.4	711.2	1,195.0	0.00	0.00	0.00
LOWER CUBERO									
7,700.0	0.00	0.00	7,468.5	960.4	711.2	1,195.0	0.00	0.00	0.00
7,723.5	0.00	0.00	7,492.0	960.4	711.2	1,195.0	0.00	0.00	0.00
ENCINAL - SJ 28-7 #113N PCP									

Targets

Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
SJ 28-7 #113N PCP	- plan hits target center	0.00	0.00	7,492.0	960.4	711.2	2,027,222.46	565,578.26	36° 34' 16.122 N	107° 36' 36.036 W
- Point										
SJ 28-7 #113N ICP	- plan hits target center	0.00	0.00	4,819.0	960.4	711.2	2,027,222.46	565,578.26	36° 34' 16.122 N	107° 36' 36.036 W
- Point										

ConocoPhillips or its affiliates

Planning Report

Database: EDM Central Planning
Company: ConocoPhillips SJB
Project: San Juan Basin - New Mexico West Wells
Site: San Juan 28 Wells
Well: SJ 28-7 #113N
Wellbore: Principal Wellbore
Design: Plan #1

Local Co-ordinate Reference: Well SJ 28-7 #113N
TVD Reference: RKB @ 6592 0ft (Original Well Elev)
MD Reference: RKB @ 6592 0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,723.5	7,492.0	ENCINAL		0.00	
5,830.5	5,599.0	MANCOS		0.00	
5,456.5	5,225.0	POINT LOOKOUT		0.00	
7,637.5	7,406.0	UPPER CUBERO		0.00	
2,139.8	2,123.0	OJO ALAMO		0.00	
7,479.5	7,248.0	GRANEROS		0.00	
7,414.5	7,183.0	GREENHORN		0.00	
3,441.4	3,309.0	HUERFANITO BENTONITE		0.00	
4,900.3	4,669.0	MENEFEE		0.00	
3,217.4	3,106.0	LEWIS		0.00	
2,593.8	2,541.0	FRUITLAND		0.00	
7,574.5	7,343.0	PAGUATE		0.00	
2,267.5	2,243.0	KIRTLAND		0.00	
3,067.3	2,970.0	PICTURED CLIFFS		0.00	
7,520.5	7,289.0	TWO WELLS		0.00	
7,664.5	7,433.0	LOWER CUBERO		0.00	
4,115.7	3,920.0	CHACRA		0.00	
4,872.2	4,641.0	MASSIVE CLIFF HOUSE		0.00	
573.0	573.0	NACIMIENTO		0.00	
6,641.5	6,410.0	UPPER GALLUP		0.00	

REFERENCE INFORMATION

RKB @ 6592.0ft (Original Well Elev)

Ground Elevation 6557.0

Reference Lat: 36° 34' 6 625 N

Reference Long: 107° 36' 44.754 W

Project: San Juan Basin - New Mexico West W

Site: San Juan 28 Wells

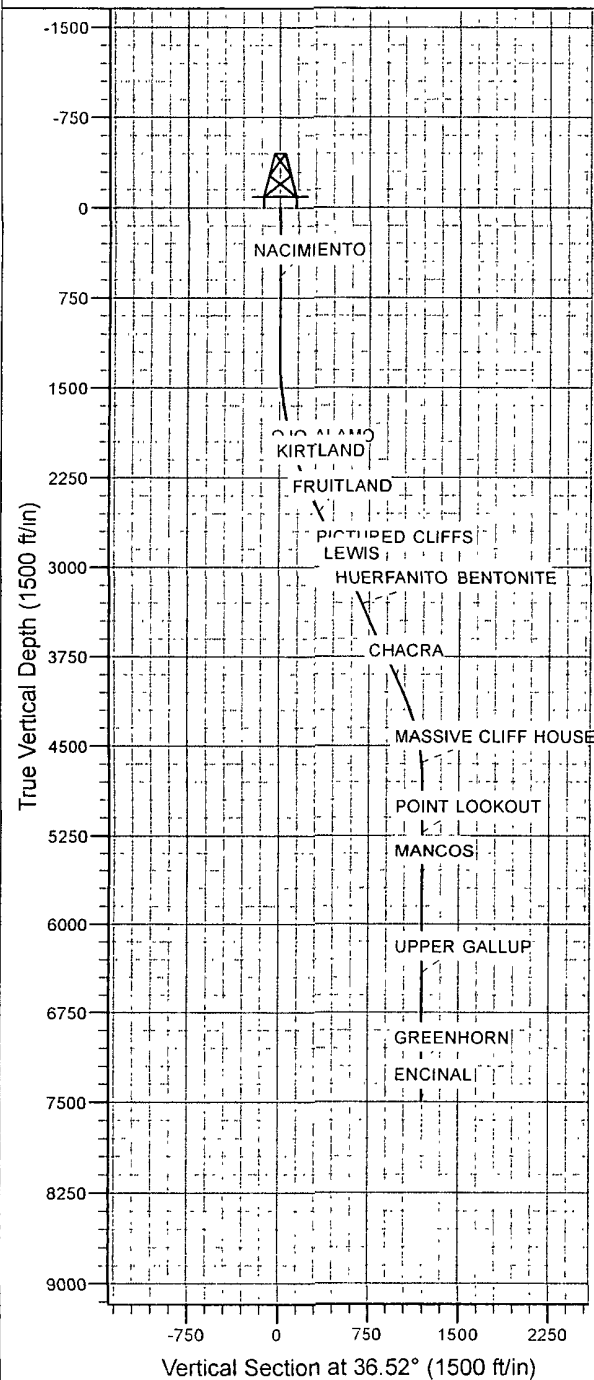
Well: SJ 28-7 #113N

Wellbore: Principal Wellbore

Design: Plan #1

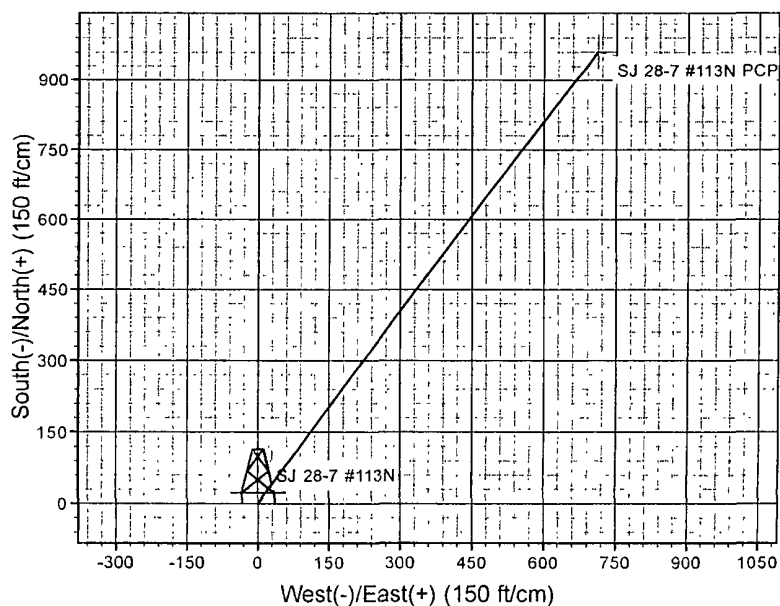
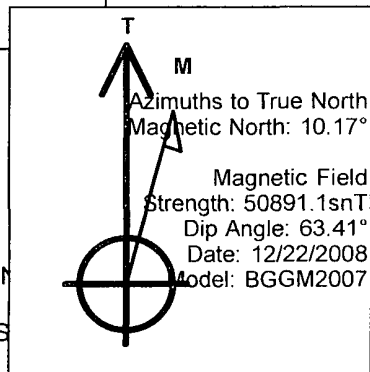
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	2451.6	25.03	36.52	2412.1	216.2	160.1	2.00	36.52	269.1	
4	4216.1	25.03	36.52	4010.9	816.2	604.4	0.00	0.00	1015.7	
5	5050.5	0.00	0.00	4819.0	960.4	711.2	3.00	180.00	1195.0	SJ 28-7 #113N ICP
6	7723.5	0.00	0.00	7492.0	960.4	711.2	0.00	0.00	1195.0	SJ 28-7 #113N PCP

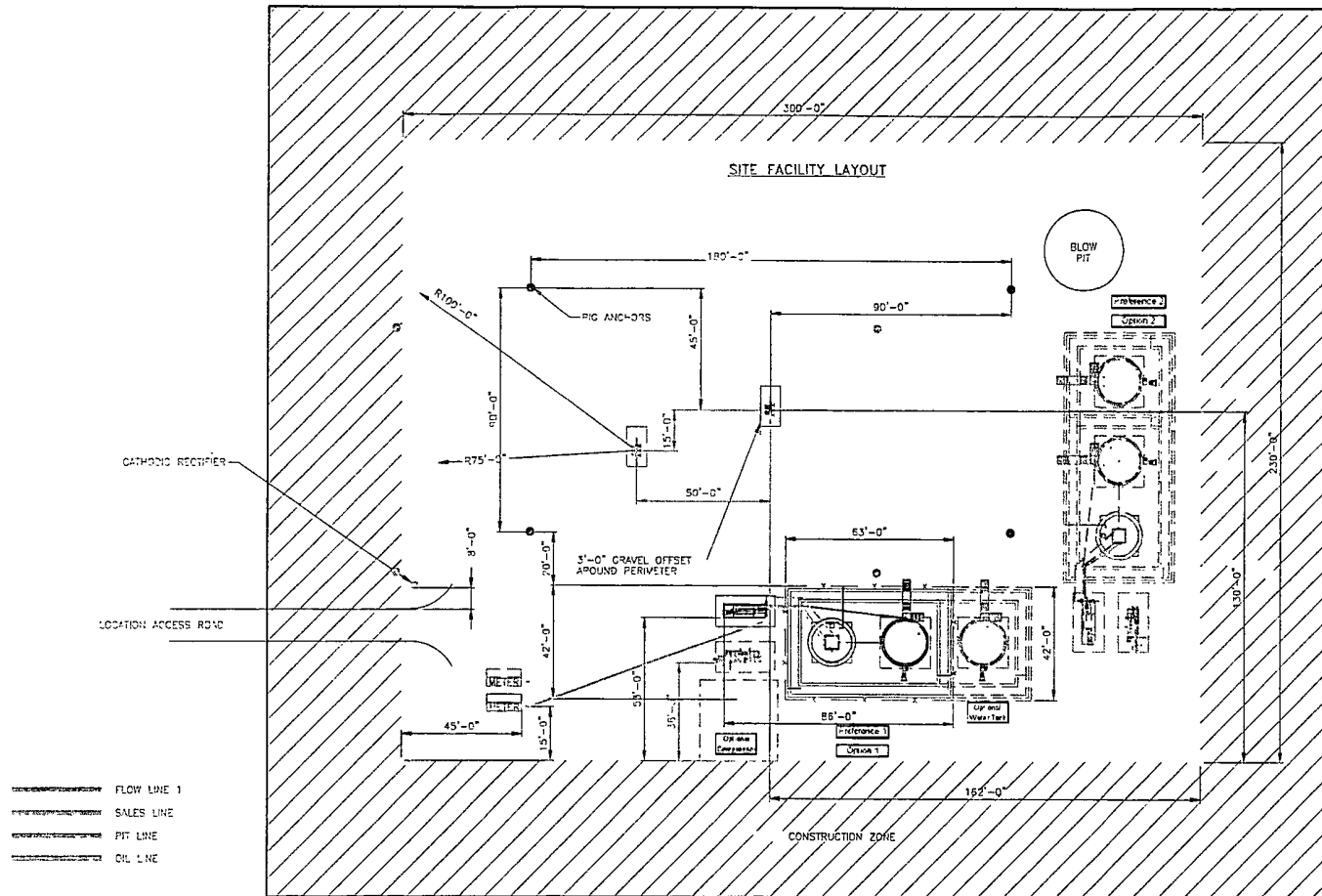


FORMATION TOP DETAILS

TVDPath	MDPath	Formation
573.0	573.0	NACIMIENTO
2123.0	2139.8	OJO ALAMO
2243.0	2267.5	KIRTLAND
2541.0	2593.8	FRUITLAND
2970.0	3067.3	PICTURED CLIFFS
3106.0	3217.4	LEWIS
3309.0	3441.4	HUERFANITO BENTONITE
3920.0	4115.7	CHACRA
4641.0	4872.2	MASSIVE CLIFF HOUSE
4669.0	4900.3	MENEFEE
5225.0	5456.5	POINT LOOKOUT
5599.0	5830.5	MANCOS
6410.0	6641.5	UPPER GALLUP
7183.0	7414.5	GREENHORN
7248.0	7479.5	GRANEROS
7289.0	7520.5	TWO WELLS
7343.0	7574.5	PAGUATE
7406.0	7637.5	UPPER CUBERO
7433.0	7664.5	LOWER CUBERO
7492.0	7723.5	ENCINAL



~~SECRET 12/14/2012 12:26:55 PM, gseeds~~



SEE SHEET 3 & 4 FOR PIPING DETAILS
ALL UNDERGROUND PIPE IS TO BE BURIED A MIN OF 3'-0" TOP

SHEET 1 OF 5

										ENGINEERING REVIEW			REFERENCE DRAWINGS				CONOCOPHILLIPS HIGH PRESSURE 3 PHASE FACILITY DIAGRAM- SITE LAYOUT		
										DATE	REVISED	DATE	NO	DESCRIPTION			CLIENT NO.	CLIENT APPR	APPR DATE
										PROCESS						ORIGIN BY	SCALE	DATE	
										MECHANICAL									
										PIPING									
										ELECTRICAL									
										I & C									
										CIVIL/STRUCTURAL PROJECT									
DESCRIPTION										DATE	BY	CHKD	ENG	DATE	SAN JUAN BUSINESS UNIT			SHEET NO. 1 OF 5	
															HP3PHASE-REV1				

Directions from the Post Office in Blanco, NM

To:

CONOCOPHILLIPS COMPANY

SAN JUAN 28-7 UNIT 113N

1020' FSL & 1675' FEL,

Section 18, T27N, R7W, N.M.P.M., Rio Arriba County,

New Mexico

Latitude: 36° 34' 06.655" N

Longitude: 107° 36' 46.946" W

Nad 83

Go East on Hwy 64 for 1.2 miles,
turn right (southerly) on CR 4450 for 3.7 miles,
stay left at y-Intersec (southeasterly) 5.7 miles,
turn right (south) 0.2 miles across wash,
turn left (southeasterly) for 3.9 miles,
continue (southerly) 3.4 miles to the top of Gould Pass,
continue (easterly) 0.5 miles,
turn right (southerly) 1.5 miles,
turn left (easterly) 0.1 miles,
turn left (northerly) into the
existing location S. J. 28-7 U #113M
where the newly staked well is twinned.